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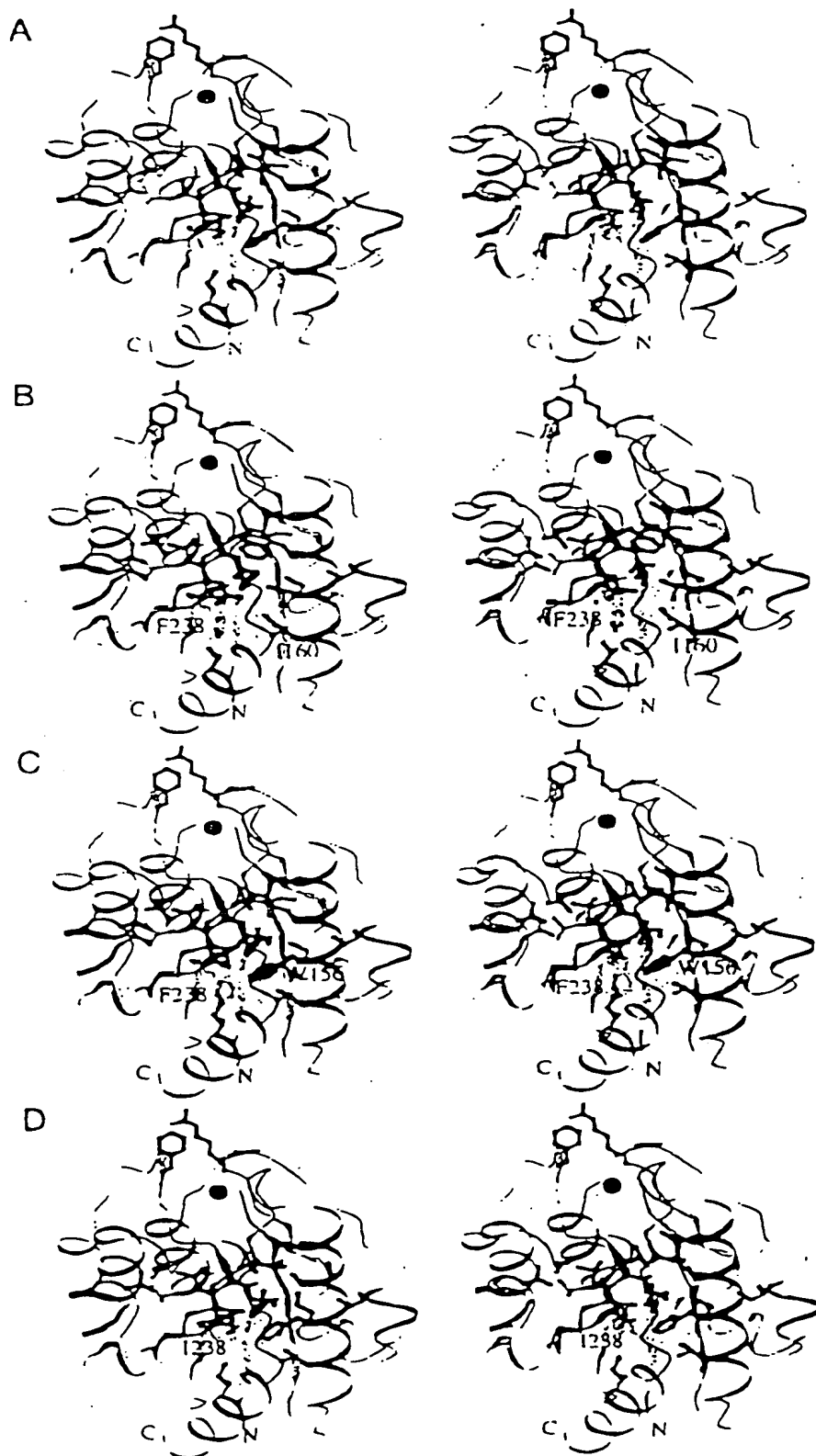


Fig. 1

Fig 1 E - cont

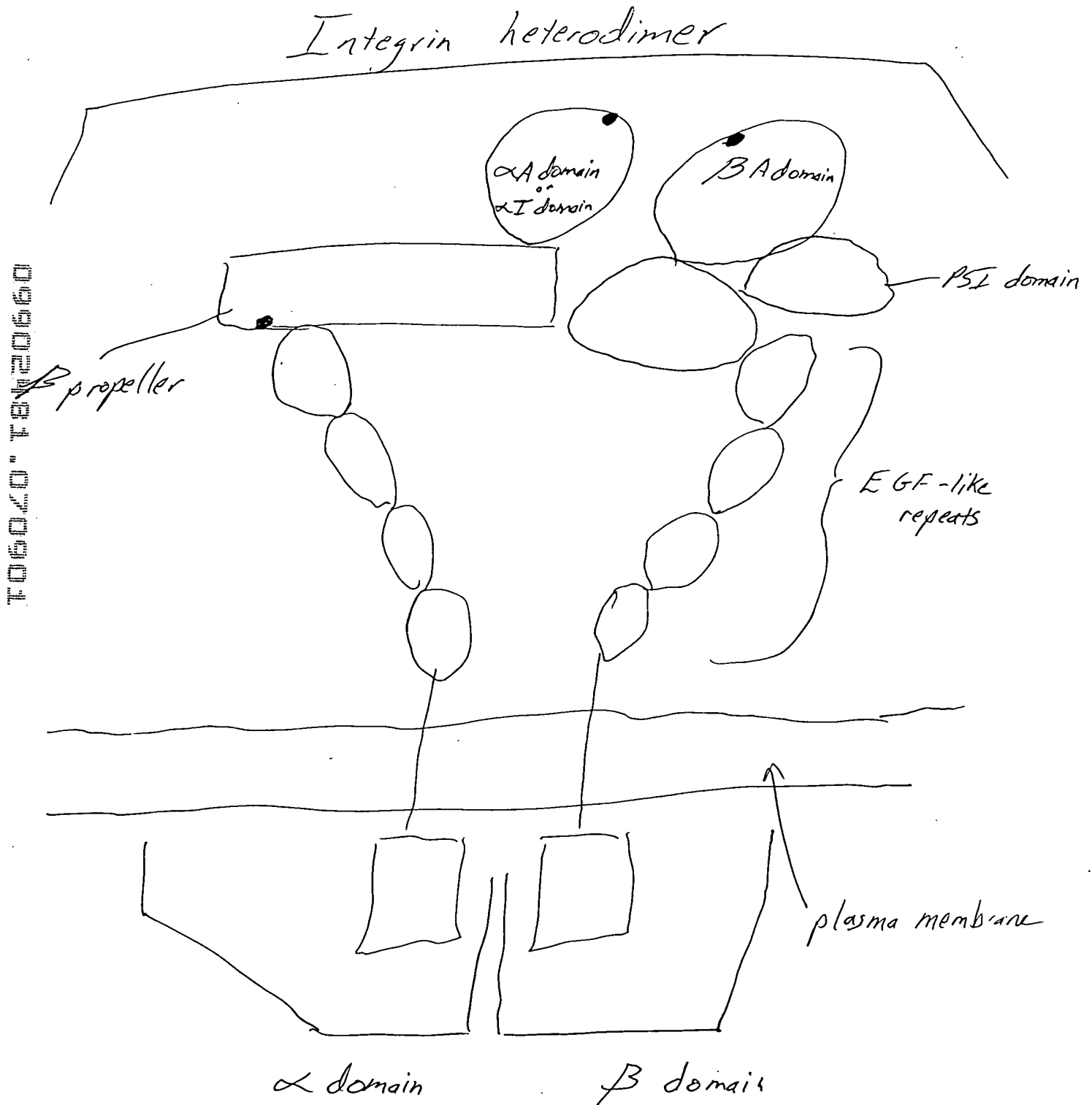


Fig 1F

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Fig 1 F

BASE COUNT 1095 a 1271 c 1289 g 1085 t
 ORIGIN 1 bp upstream of EcoRI site.

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Fig/F

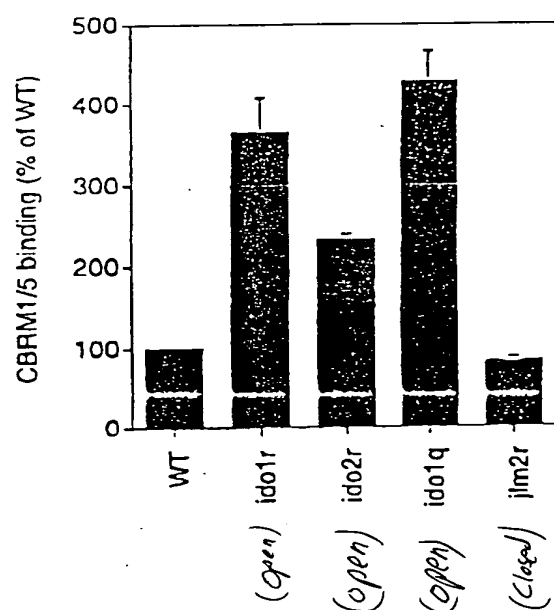
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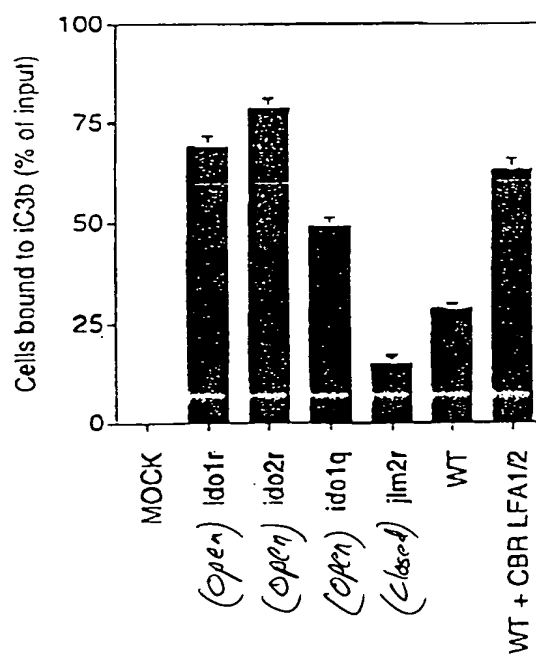
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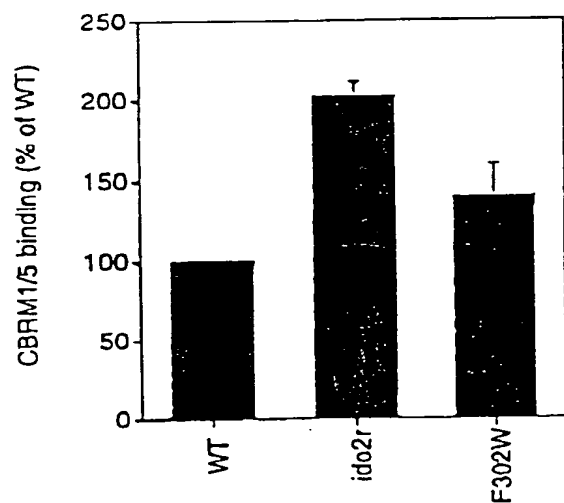
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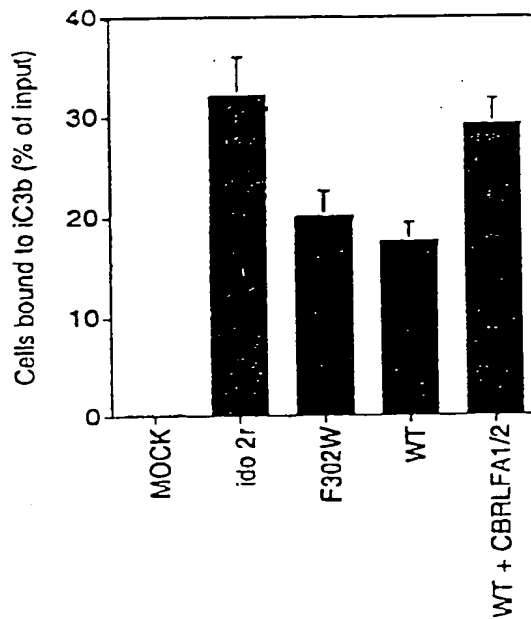
B



C



D



T06020"FB420550

Fig. 3

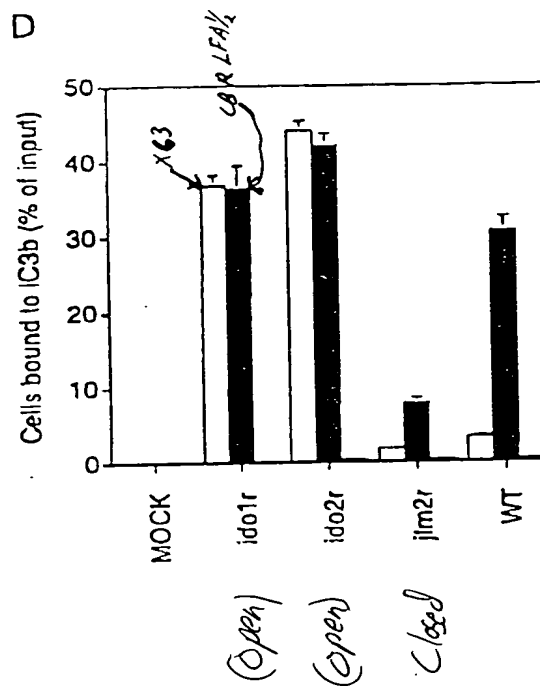
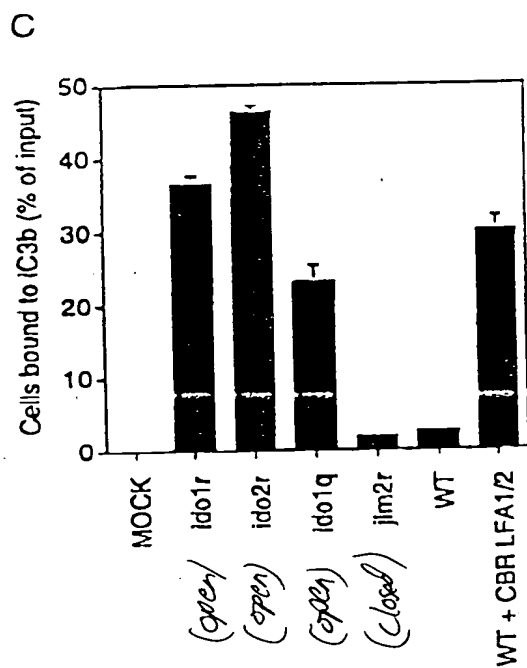
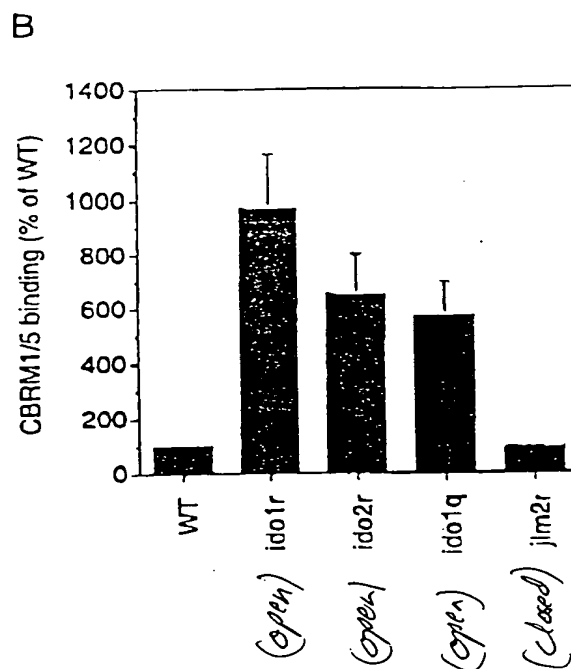
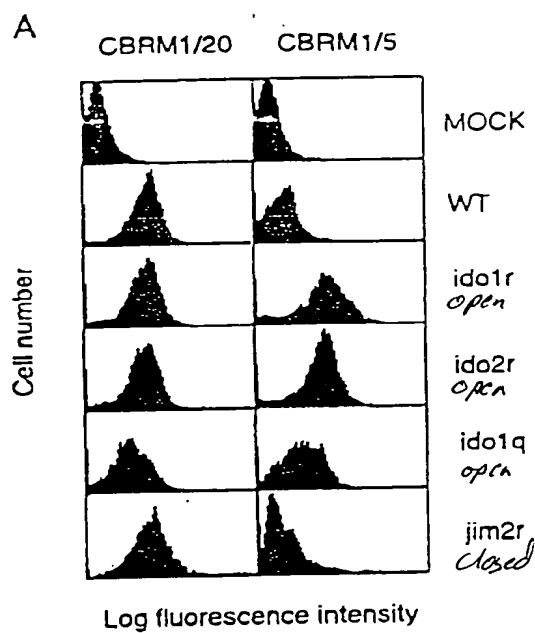
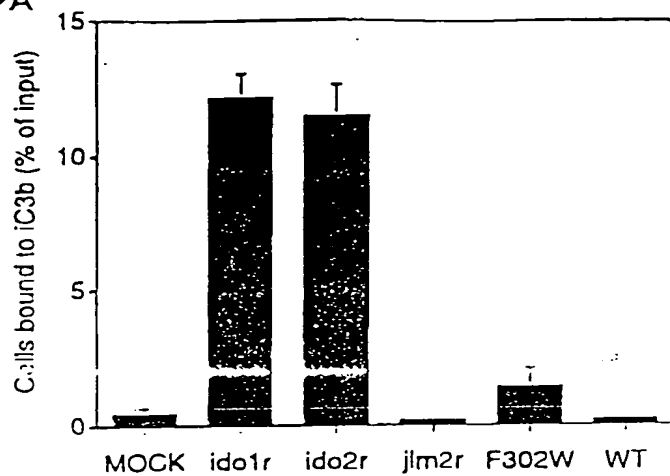
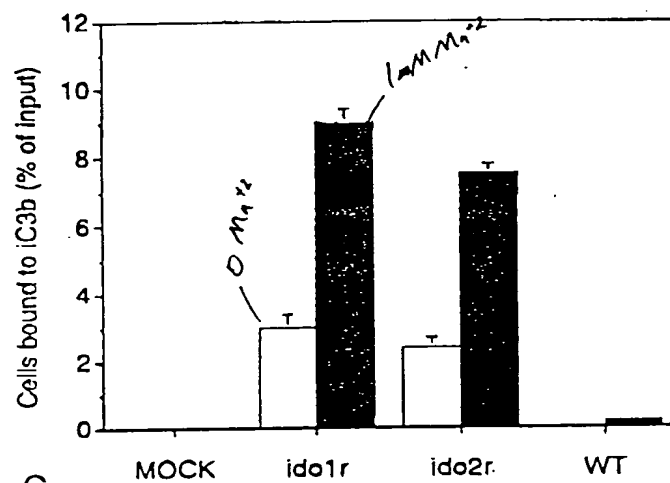


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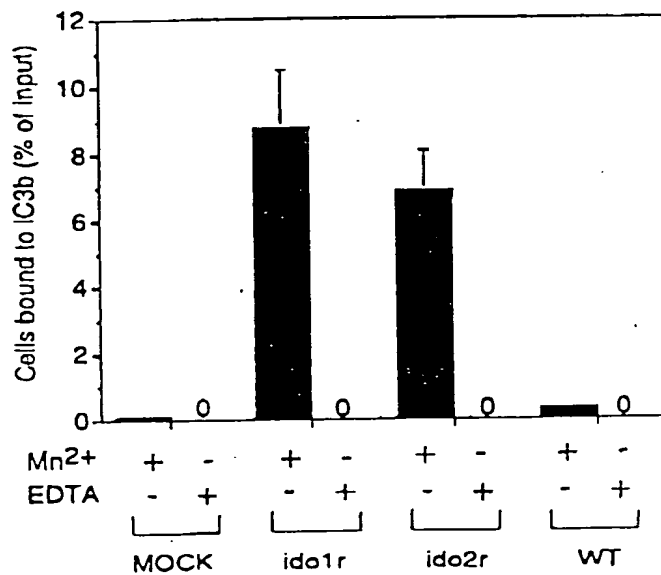
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C



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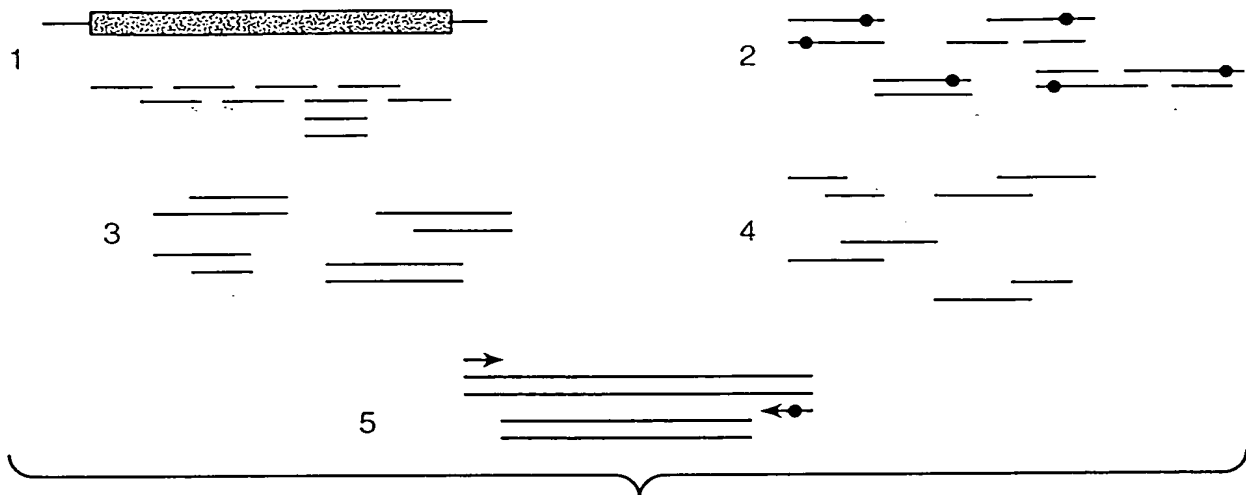


Fig 5

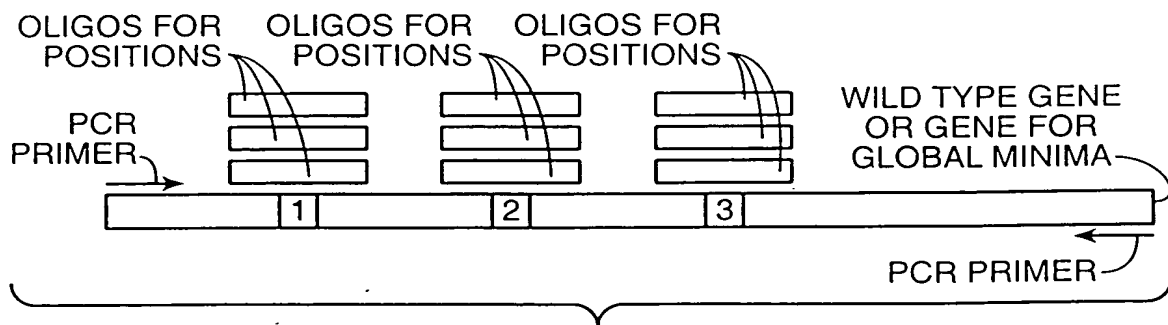
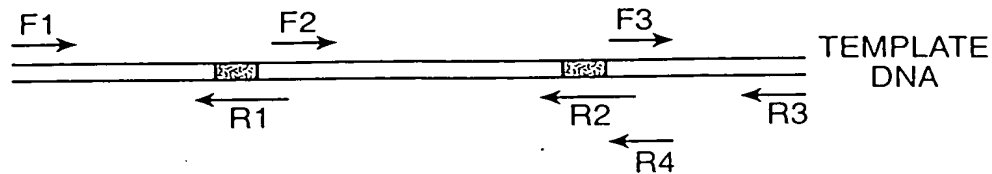


Fig 6

BLACK BOX =
REGION TO
BE MUTATED



STEP 1: SET UP 3 PCR REACTIONS:

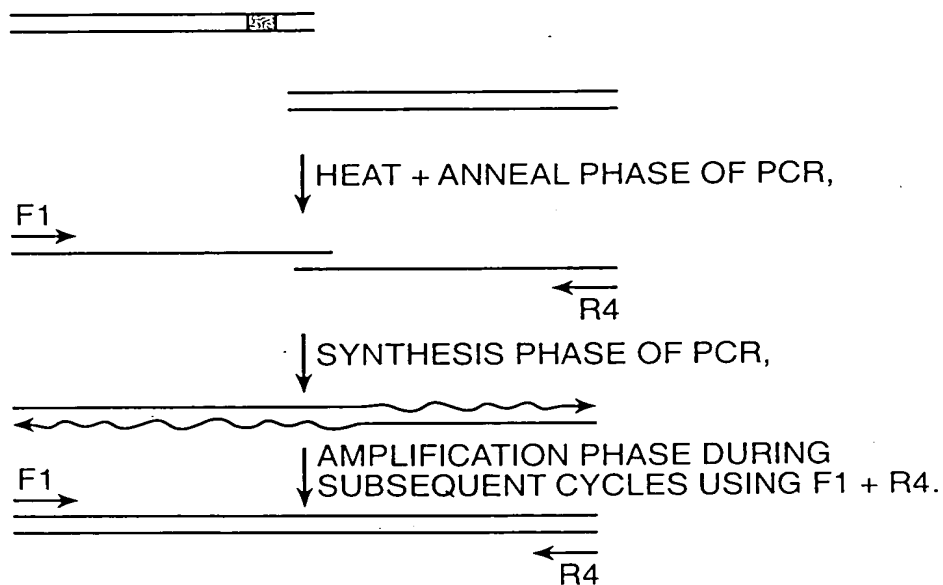
PRODUCTS:

TUBE 1:

TUBE 2:

TUBE 3:

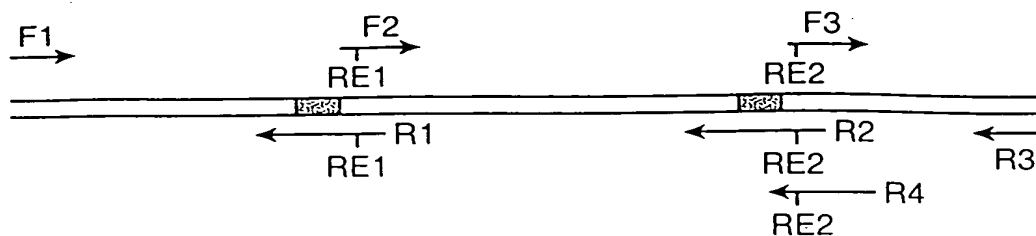
STEP 2: SET UP PCR REACTION WITH PRODUCTS OF TUBE 1 +
PRODUCTS TUBE 2 + F1 + R4.



STEP 3: REPEAT STEP 2 USING PRODUCT FROM STEP 2 + PRODUCT
FROM STEP 1, TUBE 3 + PRIMERS F1 + R3.

FIG. 7

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STEP 1: SET UP 3 PCR REACTIONS:

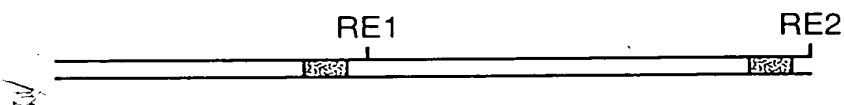
TUBE 1:
A horizontal DNA template with a single restriction site labeled RE1.

TUBE 2:
A horizontal DNA template with two restriction sites labeled RE1 and RE2.

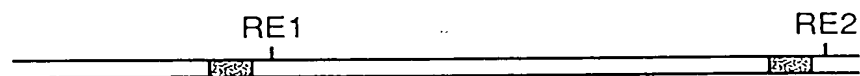
TUBE 3:
A horizontal DNA template with a single restriction site labeled RE2.

STEP 2: DIGEST PRODUCTS FROM STEP 1 WITH SUITABLE RESTRICTION ENDONUCLEASES.

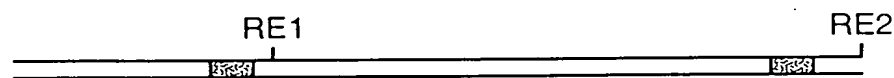
STEP 3: LIGATE DIGESTED PRODUCT FROM STEP 2, TUBE 2 WITH DIGESTED PRODUCT FROM STEP 2, TUBE 1.



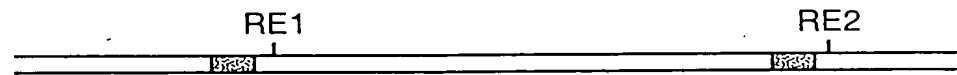
STEP 4: AMPLIFY VIA PCR LIGATED PRODUCTS OF STEP 3 WITH F1 + R4.



STEP 5: DIGEST AMPLIFIED PRODUCT OF STEP 4 WITH RESTRICTION ENDONUCLEASE #2.



STEP 6: LIGATE PRODUCT FROM STEP 5 WITH PRODUCT FROM STEP 2, TUBE 3.



STEP 7: AMPLIFY PRODUCT FROM STEP 6 WITH F1 + R3.

Fig 8
DIAGRAM 3



Fig. 9